PATTERN ALTERATIONS FOR THE ELDERLY

by

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INTRODUCTION

Aging is a complex process; manifestations of age may show in some people and not in others, may be predictable in some cases and not in others. It is recognized that differences occur in the rate of the aging process and that effects of this process vary from person to person. Complex as it is, however, the aging process is common to all.

This report will deal with those aspects of the aging process which would affect the fit of ready-to-wear or home sewn garments. It is one phase of more extensive investigation for a research project on clothing needs of the elderly. Figure changes commonly occuring with age will be considered. Suggested areas of pattern alterations for those figure changes will be made.

The Aging Process

Carlson and Stieglitz wrote in the 1950's about physiological changes which may occur in the aging process. Their concept of the life span was determined by two factors: (1) heredity, which determines body constitution and (2) body history, which includes diseases, illness and accidents that the body experiences. The rate at which a person ages would be influenced by these factors, e.g. the greater number of diseases or accidents to which one is exposed, the faster the aging process would take place (Carlson and Stieglitz).

Aging begins at birth rather than at age 40. Most aging processes occur gradually and therefore may not always be detected. During the entire life span of an individual there occurs a constant antagonism between growth and atrophy, which is the wasting away of tissue. As one matures atrophy begins to take over and then finally prevails over growth. Not only does the process take place gradually over a period of many years, but it also takes place within the body. The major factor which leads to aging exists in changes in the "intercellular environment within the organism, rather than within the cells themselves" (Carlson and Stieglitz, p. 21). A person can rarely pinpoint the exact date that a certain sign of age appears. Progressive age changes might be classified as:

1. Gradual desiccation (drying-out) of tissues. As this occurs calcium is characteristically withdrawm and lost from tissues and bones. It is the hormonal changes within the body that direct the above and most of the following occurrences.

2. Retardation of cell division, capacity for cell growth, and tissue repair.

3. Decline in capacity to produce products of secretion.

4. Gradual retardation of metabolic rate.

5. Degeneration of cells, increased cell pigmentation (causing dark spots called "liver spots" on skin), and infiltration of fatty substances.

6. Gradual decrease in tissue elasticity and degenerative changes in the elastic connective tissues.

7. Decreased speed, strength and endurance of skeletal neuromuscular reactions.

8. Progressive degeneration and atrophy of the nervous system. This includes impairment of vision, hearing, attention, memory and mental endurance.

9. Lowered homeostatic efficiency. Homeostasis is the term used to indicate the constant state in which the environment for cells and tissues is maintained. As this efficiency lowers with age there is a diminished ability to withstand stresses from without (such as temperature changes, long periods of starvation, etc.).

These processes are occurring within the body, which may make symptoms of illness less conspicuous in the older person; reaction to injury is less vigorous. However, it must be remembered that "most of the depreciation, which occurs in later years is unquestionably due to the cumulative injuries of chronic and progressive disease" rather than to the aging process (Carlson and Stieglitz, p. 25).

Figure Alterations

The effects of injury and disease, together with the internal aging processes combine to produce alterations in a person's figure. These outward manifestations of aging create fitting problems in relation to clothing.

For women, perhaps the most common figure change is a thickening of the waist and hip area; lowering of the bustline is also common. What has occurred within the body is a

redistribution of fat deposits. Other figure changes are:

1. Larger upper arms and sagging skin.
2. Thinner legs.
3. Actual shrinkage in height, due to rounding of the shoulders and progressive bending and shortening of the spinal column.
4. Limited joint motion in elbows, shoulders, knees.
5. Weak hands.
6. Sensitive skin.

Although the last three items could not be considered actual figure changes, they do present problems that affect selection of clothing.

There is little literature concerning the aging process of men. Some professionals feel, from the figure standpoint, aging does not affect men as much as women other than the thickening of the waistline. However, it might also be hypothesized that because men's clothing is looser fitting, men do not have as many "body-bulges" to fit. Therefore, what figure changes occur with age may not affect the fit of men's clothing as much as they affect women.

Pattern Alterations

As a hypothetical example through which all necessary alterations could be made, a basic woman's semi-fitted dress will be used.

Bustline - perhaps the first alteration necessary would be to lower the bustline. Considering the fact that grain of fabric must be maintained, this alteration would mean dropping the dartline the necessary amount on the crosswise grainline.

Bodice Back - The next consideration is the alteration for the bodice back. If the person to be fitted has developed rounded shoulders and perhaps a deposit of fat at the base of the neck, additional length and width must be added to that area in order to allow for the curvature. This addition will involve at least three types of pattern alterations:

1. Enlarging the back shoulder darts.
2. Adding width to the back bodice.
3. Adding length in the shoulder blade area.

Shoulder Darts - Since the function of a dart is to smoothly shape the fabric to a bulge in the body, larger bulges which may develop by rounded shoulders, require larger darts. This can be done by slashing the pattern along the center of the original dart and spreading it the needed amount. This method can also be used to alter waistline darts in a pattern for a protruding abdomen or hips.

Adding Width to Back Bodice - The simplest way to add width to the back bodice would be at the center back, slashing the center back vertically and spreading the pattern the desired amount. Since the waistline may also need to be increased, this alteration could serve both needs.

Adding Length in Shoulder Blade Area - Adding length to the bodice back is very similar in concept to adding width. A horizontal slash is made across the pattern, wherever the bulge or roundness occurs. The pieces are then spread apart the desired amount.

The last two major changes to be made can be done in one step. Width can be added to both waist and hip areas by

extending the fold or cutting line at center front the desired amount.

Minor changes which might need to be made are (1) enlarging the upper arms and (2) enlarging the neckline.

Enlarging the Upper Arms - Several means of enlarging the upper arms might be suggested depending on the amount of increase needed.

Method 1. When a small amount needs to be added, slash the center of the sleeve pattern vertically, spreading the pattern the desired amount (up to 1/2 inch).

Method 2. For amounts up to 1 inch, slash the pattern as mentioned in the first method with the addition of a dart to the shoulder circle. The reason for this dart is that additional width has been added to the pattern to make a smooth fit into the armhole impossible. Therefore, a dart is added to take away that extra amount only at the seamline, leaving the necessary amount over the upperarm.

Method 3. The third method is used for amounts over 1 inch. The pattern is cut vertically from top seamline to bottom seamline and horizontally to underarm point. It is then pivoted to open the necessary amount.

Enlarging the Neckline - The general method for enlarging the neckline is simple and involves drawing a new neckline which is lower in the front or back than the original. This method results in a neckline with a larger circumference than the original. When the head is carried forward or there is fullness in the front of the throat, the neckline should be deepened in

front the amount needed. For a wide neck the front and back of the neckline may need to be lowered. A neckline facing or collar would need to be altered to fit the new neckline.

Once the suggested pattern alterations are made, redrawing the outside seamlines on pattern pieces may be necessary to retain the line designed for the garment.

PROBLEM: Bustline dart too high.

Alteration: Lower bust dart.

Procedure:

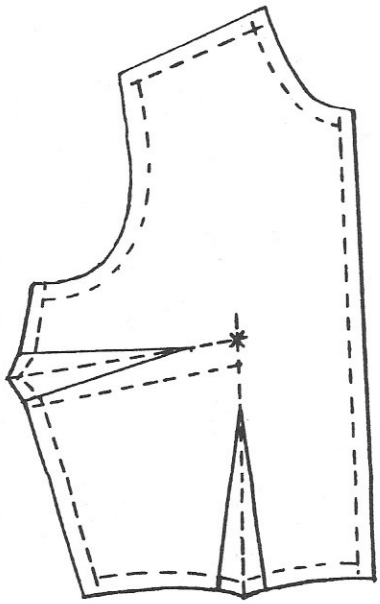
1. To determine bustpoint on a pattern, draw a line through the center of bust and waist darts. The bustpoint is where these two lines intersect.*

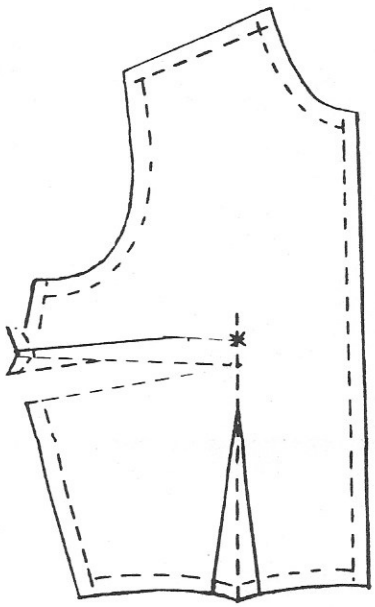
2. Draw a line parallel to the original bust line from side seam to bust point where the new dart should be.

3. Slash along both dotted bustlines and up to original bust point leaving a hairline of pattern connected at the original bust point.

4. Close the original dart and the new one will open up.

5. Draw the new dart within this opening so that it ends approximately 3/4 inch away from the bustpoint. For larger sizes this may vary up to 2 inches from the bustpoint. Redraw side seams.





PROBLEM: Rounded Shoulders

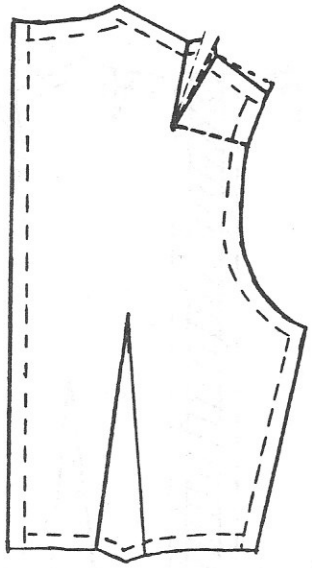
Alteration: Enlarging shoulder dart.

Procedure:

1. Slash through center of original shoulder dart and also from the armscye to point of dart leaving a hairline of pattern connected at the point of the dart.

2. Hinge or pivot to spread the dart open the needed amount.

3. Redraw the shoulder line using the original pattern.



PROBLEM: Bodice back too small.

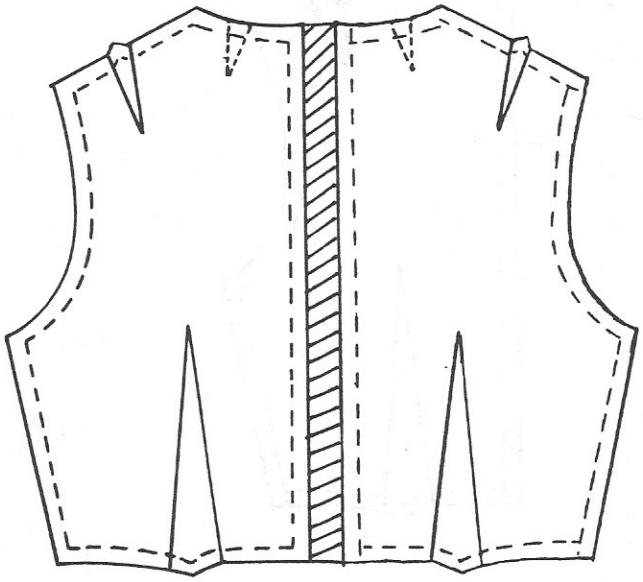
Alteration: Adding width at center back.

Procedure:

1. Slash pattern vertically along center back.

2. Spread the pattern the desired amount, the same amount all the way down the seamline.

3. To correct increased neckline, two small darts should be added.



PROBLEM: Bulge or roundness in shoulder blade area.

Alteration: Adding length in shoulder blade area. (amounts up to 1")

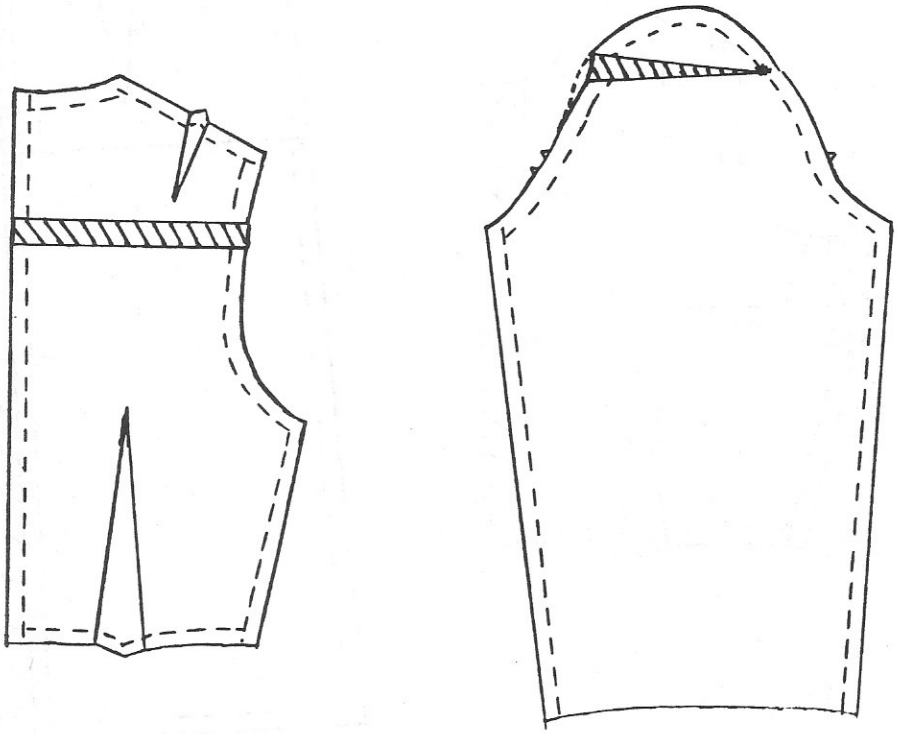
Procedure:

1. Slash pattern horizontally where bulge or roundness occurs.

2. Spread pattern the desired amount.

3. This will change the armscye. To increase the armscye, slash the sleeve pattern horizontally to the seam allowance on opposite side to *.

4. Spread sleeve pattern the amount to correspond to increased length in bodice back.



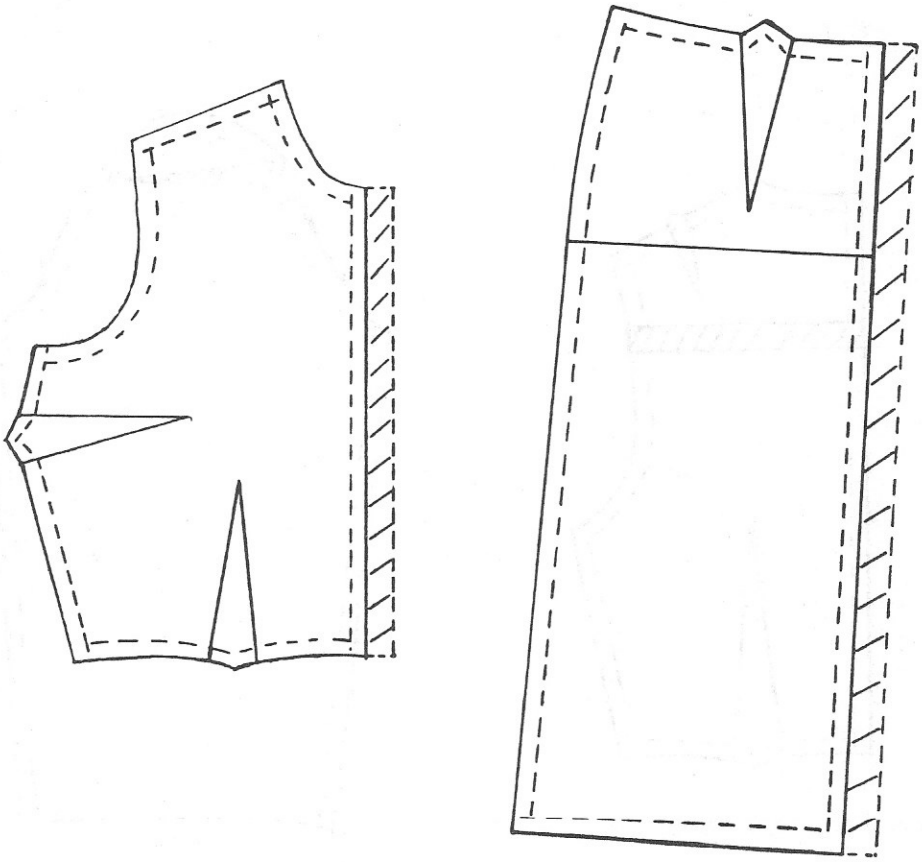
PROBLEM: Large hip and waist.

Alteration: Adding width to waist and hip.

Procedure:

1. Extend fold or cutting line the desired amount at center front.

2. Alter the collar and/or facings of garment to correspond to increase in neckline.



PROBLEM: Large upper arms.

Alteration: Increasing upper sleeve 1/2 inch.

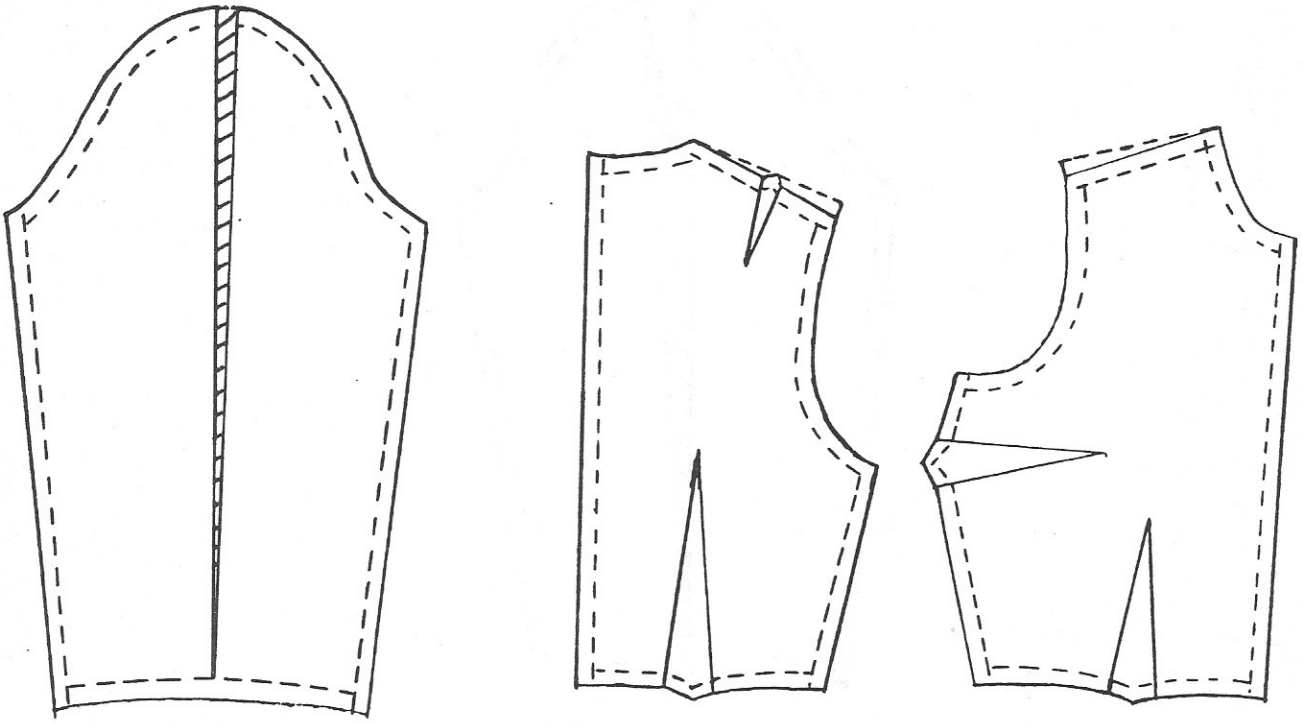
Procedure:

1. Slash sleeve vertically from top to bottom leaving a hairline connected at bottom.

2. Spread the sleeve the desired amount (up to 1/2 inch).

3. Since this will increase sleeve cap, the armscye will also need to be increased. To do this, increase front and back shoulder of the bodice each by 1/4 inch.

4. Taper new shoulder seam to original neckline.



PROBLEM: Large upper arms.

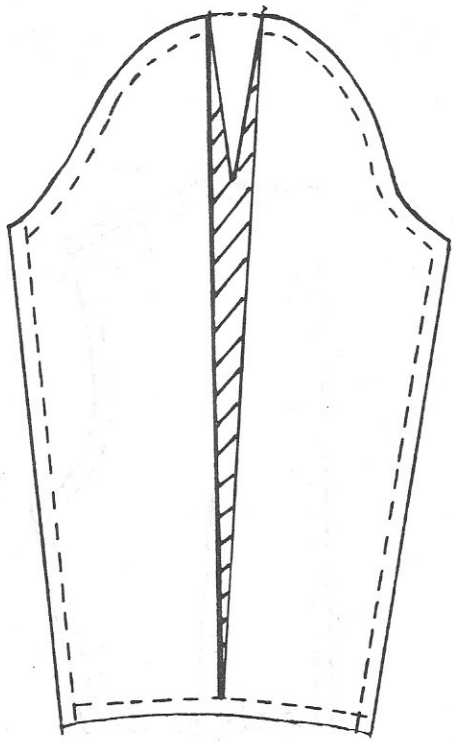
Alteration: Increasing upper sleeve up to 1 inch.

Procedure:

1. Slash sleeve vertically from top to bottom seam allowance.

2. Spread the sleeve the desired amount (up to 1 inch).

3. Add a dart at sleeve cap to take away the fullness at seamline, leaving necessary amount over upper arm.



PROBLEM: Large upper arms.

Alteration: Increasing upper sleeve width (amounts over 1 inch)

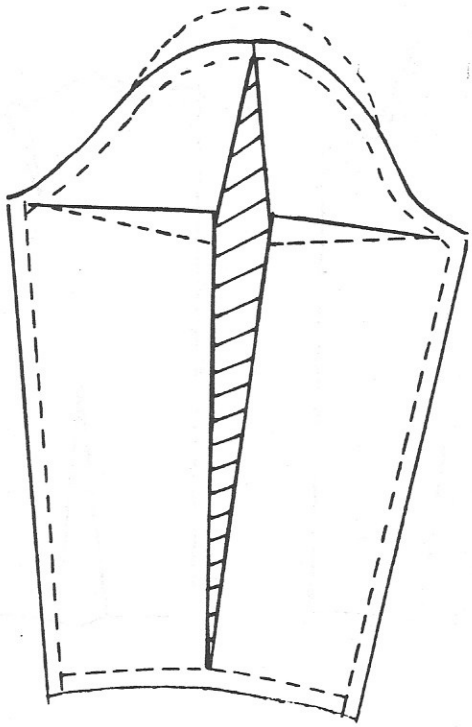
Procedure:

1. Slash sleeve vertically leaving hairline connected at top and bottom.

2. Slash sleeve horizontally from vertical slash to underarm points leaving hairline connected at underarms.

3. Pivot to spread sleeve the desired amount.

4. Redraw sleeve cap using original pattern to restore lost sleeve height.



PROBLEM: Fullness at throat or neckline.

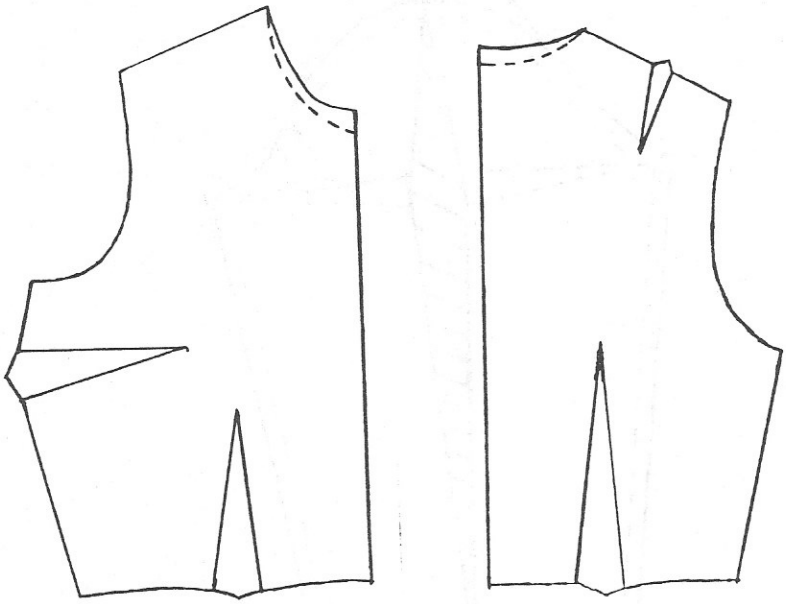
Alteration: Lowering neckline at front.
Lowering neckline at front and back.

Procedure:

1. Mark center front and center back neckline the distance neckline is to be lowered.

2. Redraw neckline curve from new center front and center back, tapering to original neck/shoulder point.

3. Alter collar and/or facings to correspond to new neckline.



PROBLEM: Fullness at throat or neckline.

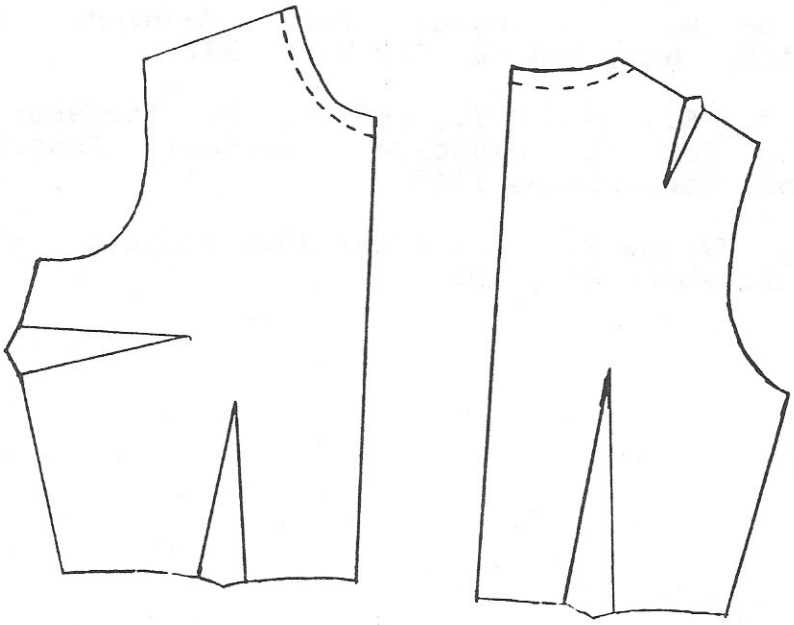
Alteration: Increasing circumference of entire neckline.

Procedure:

1. Determine amount of needed increase.

2. Redraw neckline to correspond to needed increase.

3. Alter collar and/or facings to correspond to new neckline.



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